

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

*[Handwritten signature]*



Inventor(s): Osamu Samuel NAKAGAWA et al.

Serial No.: Unknown

Examiner: To Be Determined

Filing Date: Herewith

Group Art Unit: N/A

Title: OPTIMIZATION OF CLOCK SCHEDULING FOR A SYNCHRONOUS SYSTEM

ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$240.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:  
☐ Statement under 37 CFR 1.97(e), and  
☐ a petition under 37 CFR 1.97(d)(2), and  
☐ a \$130.00 petition fee set forth in 37 CFR 1.17(i).  
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no.

Date of Deposit

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

By \_\_\_\_\_

Typed Name:

Respectfully submitted,

Osamu Samuel NAKAGAWA et al.

By *John W. Ryan*  
John W. Ryan

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Reg. No. 33,771

Date: *July 27, 2001*

Telephone No.: (202) 663-6446

## PATENT APPLICATION

Sheet 1 of 1

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

10004741-1

SERIAL NO.

APPLICANT

Osamu Samuel NAKAGAWA et al.

FILING DATE

Herewith

GROUP

N/A

JCS79 U.S. PTO  
09/915531

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	1A	5,758,130	May 26, 1998	Michael J. DHUEY	395	552
	1B	6,075,832	Jun. 13, 2000	George GEANNOPOULOS et al.	375	375
	1C	5,849,610	Dec. 15, 1998	Qing ZHU	438	129
	1D					
	1E					
	1F					
	1G					
	1H					
	1I					
	1J					
	1K					

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
	1L							
	1M							
	1N							
	1O							
	1P							

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	1Q	LIU, X. et al., "Maximizing Performance by Retiming and Clock Skew Scheduling", Design Automotaton Conference, 1999, pages 231-236.
	1R	PAPAEFTHYMIU, M. et al., "Retiming and Clock Scheduling for High-Performance Synchronous Circuits", 10 pages, (date unknown).
	1S	KOURTEV, I. et al., "Timing Optimization Through Clock Skew Scheduling", Kluwer Academic Publishers, 2000, pages 1-194.

EXAMINER

DATE CONSIDERED